

Claims

1. Method for applying flat material web sections (28) onto a first flat material web (6) moving in a machine direction at a first web speed during production of hygiene articles or medical articles, wherein the dimension of the flat material web sections (28) in the machine direction is shorter than the dimension of the articles to be produced, wherein the flat material web sections (28) are separated from an endless web (8) using a cut-and-place procedure, and disposed onto the first flat material web (6), wherein the endless web (8) is supplied towards a cutting roller (18) of a cutting station at a second web speed, characterized in that a front section (26) of the endless web (8) is disposed against a surface section (24) of an anvil roller (22) cooperating with the cutting roller (18), which is less curved than the periphery (34) of the anvil roller (22), and wherein the front section (26) is cut off from the endless web (8) to form the flat material web section (28) and a respectively cut-off flat material web section (28) is accelerated without slip by the anvil roller (22).
2. Method according to claim 1, characterized in that the front section (26) of the endless web (8) is disposed against a surface section (24) of the anvil roller (22), having a cylindrical curvature and having a radius of curvature which is larger than the radius of the periphery (34) of the anvil roller (22).
3. Method according to claim 1 or 2, characterized in that the flat material web section (28) is applied to the first flat material web (6) at substantially the first web speed.

4. Method according to claim 1, 2 or 3, characterized in that the front section (26) of the endless web (8) is suctioned against the surface section (24) of the anvil roller (22) through underpressure.
5. Method according to one or more of the preceding claims, characterized in that the angular velocity of the anvil roller (22) is controlled in a periodically changing manner.
6. Method according to claim 5, characterized in that the angular velocity of the anvil roller (22) or of a further transport roller is controlled during application of the flat material web section (28) onto the first flat material web (6) in such a manner that the speed of the flat material web section (28) corresponds to the first web speed during application.
7. Method according to claim 5 or 6, characterized in that the angular velocity of the anvil roller (22) during receiving and cutting off the flat material web section (28) is controlled in such a manner that the speed of the flat material web section (28) corresponds to the second web speed.
8. Method according to any one or more of the preceding claims, characterized in that during application of the flat material web section (28) onto the first flat material web (6), a pressure roller (32) is used on the side of the first flat material web (6) facing away from the anvil roller (22).
9. Method according to one or more of the preceding claims, characterized in that an endless web (8) is supplied which is folded, in particular, in a Z-shape about its axes (48, 50, 132, 134) extending in its longitudinal direction.

10. Method according to one or more of the preceding claims, characterized in that the folded web sections are detachably held together through welding or gluing or perforation points (151).
11. Device (2) for applying flat material web sections (28) onto a first flat material web (6) moving in a machine direction at a first web speed during production of hygiene articles or medical articles, wherein the size of the flat material web sections (28) in the machine direction is less than the size of the articles to be produced, and wherein the flat material web sections (28) are separated from an endless web (8) using a cut-and-place procedure and disposed onto the first flat material web (6) in the machine direction, comprising a cutting roller (18) and an anvil roller (22) cooperating therewith, characterized in that the anvil roller (22) has a surface section (24) which cooperates with the flat material web section (28) to be separated, and which is less curved than the periphery (34) of the anvil roller (22).
12. Device according to claim 11, characterized in that the surface section (24) is cylindrically curved.
13. Device according to claim 12, characterized in that the radius of curvature of the surface section (24) is 50 to 250 mm, in particular 65 to 200 mm, in particular 80 to 150 mm and preferably 90 to 120 mm.
14. Device according to claim 12 or 13, characterized in that the radius of curvature of the surface section (24) is at least 1.5 times, in particular at least 1.7 times, in particular at least 1.8 times, in

particular at least 1.9 times, and preferably at least 2 times the radius of the periphery (34) of the anvil roller (22).

15. Device according to one or more of the claims 10 through 14, characterized in that the radius of the periphery (34) of the anvil roller (22) is 25 to 75 mm, in particular 35 to 65 mm, and preferably 42 to 52 mm.
16. Device according to one or more of the claims 10 through 15, characterized in that the cutting roller (18) comprises at least two, preferably at least three knives (20) on its periphery.
17. Device according to one or more of the claims 10 through 16, characterized in that the knives (20) are resiliently held on the cutting roller (18).
18. Device according to one or more of the claims 10 through 17, characterized in that the anvil roller (22) comprises one single surface section (24) for receiving the flat material web section (28).
19. Device according to one or more of the claims 10 through 18, characterized by a drive control means for periodically changing the angular velocity of the cutting roller (18) and the anvil roller (22).
20. Device according to one or more of the claims 10 through 19, designed such that the first web speed is at least 50 m/min to 400 m/min.
21. Device according to one or more of the claims 10 through 20, designed in such manner that the second web speed is 5 to 80 m/min.

22. Device according to one or more of the claims 10 through 21, designed in such a manner that the length of the article to be produced in the machine direction is 30 to 150 cm, in particular 45 to 110 cm.
23. Device according to one or more of the claims 10 through 22, designed in such a manner that the section length of the flat material web section (28) is 1 to 10 cm, in particular 3 to 8 cm..
24. Device according to one or more of the claims 10 through 23, designed in such a manner that the endless web (8) to be supplied is folded, in particular in a Z-shape, about axes (48, 50, 132, 134) extending in its longitudinal direction.
25. Device according to one or more of the claims 10 through 24, characterized in that the moment of inertia of the anvil roller is less than 0.0030 kg m^2 , in particular less than 0.0025 kg m^2 .
26. Device according to one or more of the claims 10 through 25, characterized in that the moment of inertia of the cutting roller is less than 0.0020 kg m^2 , in particular less than 0.0016 kg m^2 .
27. Device according to any one or more of the claims 10 through 26, characterized in that the moment of inertia of the pressure roller is less than 0.0020 kg m^2 , in particular less than 0.0016 kg m^2 .